Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



1.96 R31F50 Cof. 2

WATER SUPPLY OUTLOOK FOR OREGON



U. S. DEPARTMENT of AGRICULTURE * SOIL CONSERVATION SERVICE

Collaborating with

OREGON STATE UNIVERSITY and STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.



TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 841 38
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

CONSERVATION OF WATE BEGINS WITH THE

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR OREGON

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

APRIL 8, 1974

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

J. W. MITCHELL

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE PORTLAND, OREGON

In Cooperation with

G. BURTON WOOD

DIRECTOR
OREGON AGRICULTURAL
EXPERIMENT STATION

CHRIS L. WHEELER

STATE ENGINEER STATE OF OREGON

Report prepared by

TOMMY A. GEORGE, Snow Survey Supervisor and

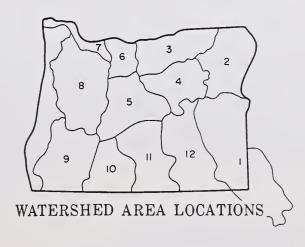
JAMES W. HAGLUND, Assistant Snow Survey Supervisor

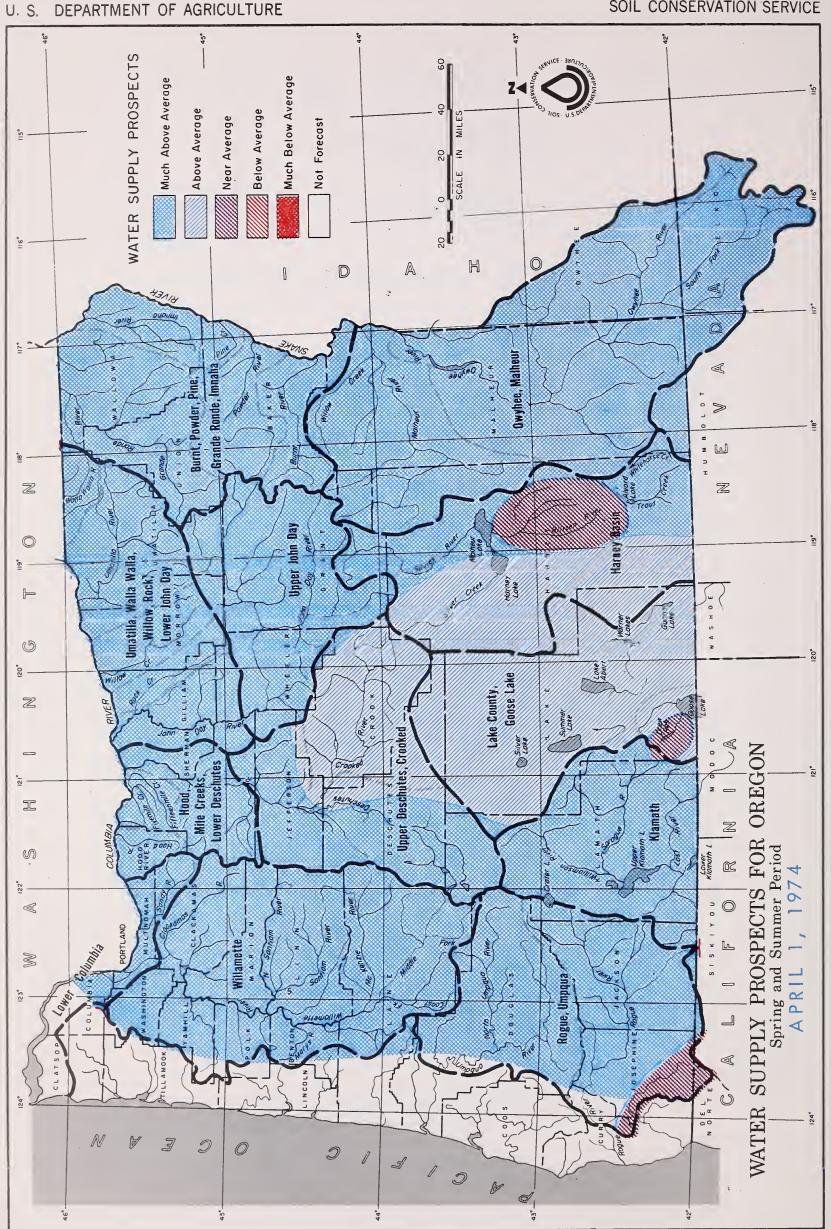
SOIL CONSERVATION SERVICE 1218 S.W. WASHINGTON ST. PORTLAND, OREGON 97205



TABLE OF CONTENTS

P A G	ξE
WATER SUPPLY PROSPECTS FOR OREGON(MAP) FACING PAGE	1
WATER SUPPLY OUTLOOK FOR OREGON	1
DETAILED WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS	
OWYHEE, MALHEUR AREA	1
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA AREA	2
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY AREA	3
UPPER JOHN DAY AREA	4
UPPER DESCHUTES, CROOKED AREA	5
HOOD, MILE CREEKS, LOWER DESCHUTES AREA	6
LOWER COLUMBIA AREA	7
WILLAMETTE AREA	8
ROGUE, UMPQUA AREA	9
KLAMATH AREA 1	0
LAKE COUNTY. GOOSE LAKE AREA 1	1
HARNEY BASIN AREA 1	2
BASIC DATA SUPPLEMENTS SNOW II SOIL MOISTURE III PRECIPITATION	
MAP AND INDEX OF OREGON SNOW COURSES(MAP)	
LIST OF COOPERATORS	





WATER SUPPLY OUTLOOK for OREGON

APRIL 1, 1974

The water supply outlook for Oregon is extremely good. The mountain snowpack is generally third or fourth highest on record at most snow courses. Winter's precipitation has been above normal and reservoir storage is excellent.

SNOWPACK

Fourteen snow courses located along the northern Cascade crest, in the Blue Mountains above Milton-Freewater and in the Wallowa Mountains, set all time records for snow water equivalent on April 1. The snowpack around Mt. Hood exceeds the record year of 1972 at many locations. Many courses were second, third and fourth highest on record. The snowpack is generally 100-120% in southcentral Oregon, 150 to 200% in the Cascades and 120 to 200% in eastern Oregon.

PRECIPITATION

Precipitation was above normal in all areas of the state during March. It was especially heavy in Klamath and Lake counties where it was over two times normal. Winter precipitation has ranged from 120% in southeastern Oregon up to 165% in the southwestern part of the state. All other areas varied between 140 and 155% of average.

RESERVOIR STORAGE

Twenty-five major irrigation reservoirs are storing 2,816,000 acre feet of water. This is 550,000 acre feet more than the average amount stored on April 1.

STREAMFLOW

Warm temperatures during the middle of March and more than normal precipitation combined to bring about heavy streamflow during the past month. Many streams produced flows 1 1/2 to 2 times normal. Streamflow for the normal snowmelt period, April-July, will generally be excellent in all areas of the state.

continued on next page -

continued -

SUMMARY

The above average condition of stored water supplies and a near record snow-pack insures excellent supplies of water this summer for Oregon.



This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, NOAA National Weather Service, and other cooperators.

WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS OREGON

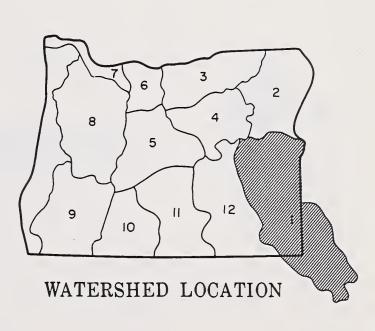
*as of*APRIL 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS ABOVE AVERAGE IN MALHEUR COUNTY. WARM TEMPERATURES AND 149% OF NORMAL PRECIPITATION PRODUCED HIGH MARCH STREAMFLOW. INFLOW INTO OWYHEE WAS THE SECOND HIGHEST SINCE 1910. AS A RESULT, RESERVOIR STORAGE IS EXCELLENT. THE SNOW-PACK REMAINS ABOVE AVERAGE THROUGHOUT THE BASIN AND EXCELLENT SPRING AND SUMMER STREAMFLOWS ARE ANTICIPATED.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
Boulder Creek Bully Creek Cow Creek Jordan Creek Jordan Valley Irrig. Dist. McDermitt Creek Oregon Canyon Creek Owyhee Project Succor Creek Tenmile Creek Vale-Oregon Irrig. Dist. Warmsprings Irrig. Dist. Willow Creek (Reservoired)		



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS		THIS YEAR			PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i		
Bully Creek at Warmsprings Malheur near Drewsey	17.0 112 114	126 158 158	March-May April-July April-Sept.		13.5 71 72		
Malheur, North Fork at Beulah	84 89	142 138	April-July April-Sept.		59 64		
Owyhee Reservoir net Inflow m	420 440	136 133	April-July April-Sept.	243 270	309 332		

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

TOREGAST DATE OF LOW	I LOW VAL	ULS		KEZEKANIK ZINKARE (inousand	AC. Ft.)	END OF	MONTH
FORECAST POINT	Low Flow Value	Forecast Date Stream Will Recede to Low	Average Date of Low Flow	RESERVOIR	Usable		sable Stora	ge
	Second/Ft.	Flow Value	Value	WESEK OIK	Capacity	This Year	Last Year	Average i
Owyhee near Rome	1000 250	June 1 July 1	May 24 June 20	Antelope Beulah Reservoir Bully Creek Owyhee Warmsprings	70.0 60.0 30.0 715.0 191.0	58.4 27.8 698.3 141.3	42.6 19.6 702.6 123.8	28.9 ^m 42.9 22.3 510.1 119.1
			į		1	l		

SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

				(COMPARISON WITH PREVIOUS YEARS)					
RIVER BASIN	RIVER BASIN Number of as PERCENT OF: RIVER BASIN and/or		Number of Courses Averaged	s WATER AS PERCEN					
Malheur River Owyhee River	2 4	120 130	105	Jordan Creek Malheur River Owyhee River	4 5 5 5	170 195 95	135 145 120		
,	-								

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS

OREGON

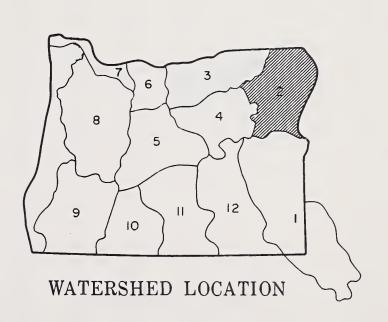
*as of*APRIL 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK FOR NORTHEASTERN OREGON REMAINS EXCELLENT. THE SNOWPACK IN THE MOUNTAINS IS 50% ABOVE NORMAL, WITH SOME SNOW COURSES SETTING ALL TIME RECORDS AND MANY OF THE COURSES RECORDING THE SECOND OR THIRD HIGHEST WATER CONTENT ON RECORD. STREAMFLOW VOLUMES ARE EXPECTED TO RANGE FROM 120 TO 175% OF NORMAL DURING THE SPRING AND SUMMER MONTHS. ABOVE AVERAGE PRECIPITATION AND SOIL MOISTURE PRODUCED 1 1/2 TIMES NORMAL STREAMFLOW FOR MARCH.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow P	eriod
STREAM or AREA	Spring Season	Late Season
Alder Slope	Excellent	Excellent
Baker Valley	Excellent	Excellent
Big Creek	Excellent	Excellent
Clover Cr. (nr. N. Powder)	Excellent	Excellent
Cove	Excellent	Excellent
Durkee	Excellent	Excellent
Eagle Valley	Excellent	Excellent
Elgin	Excellent	Excellent
Enterprise-Joseph	Excellent	Excellent
Hereford-Bridgeport	Excellent	Excellent
Immaha River	Excellent	Excellent
LaGrande-Island City	Excellent	Excellent
Lostine-Wallowa	Excellent	Excellent
No. Powder River-Wolf Creek	Excellent	Excellent
Pine Valley	Excellent	Excellent
Powder River-Elk Creek	Excellent	Excellent
Summerville	Excellent	Excellent
Sumpter Valley	Excellent	Excellent
Union-Hot Lake	Excellent	Excellent
Unity	Excellent	Excellent



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS		THIS YEAR			PAST RECORD		
	FORE	CAST	FORL CAST	THOUSAND ACRE FEET			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i		
Bear near Wallowa	80	121	April-Sept.		66		
Burnt near Hereford	56	174	April-July		32		
	57	172	April-Sept.		33		
Catherine near Union	80	124	April-Sept.		65		
Eagle Creek abv. Skull Creek	258	147	April-July		175		
20820 02000 0000	279	147	April-Sept.		190		
Grande Ronde at La Grande	246	160	April-July	55	154		
orando nondo do 2a orando.	254	161	April-Sept.	56	158		
Hurricane Near Joseph	59	126	April-Sept.		47		
Imnaha at Imnaha	436	142	April-Sept.		307		
Lostine near Lostine	155	124	April-Sept.		125		
	82	149	April-July		55		
Powder near Sumpter	84	150	April-Sept.		56		
W. 11 From Frank mann Joseph	12.4	135	April-July		9.2		
Wallowa, East Fork near Joseph	15.5	136	April-Sept.		11.4		
	13.3	130	April Sept.		11.4		
•				,			

RESERVOIR STORAGE (Thousand Ac Ft) END OF MONTH

SUMMARY of SNOW MEASUREMENTS

ESEKANIK SINKARE	CHIOUSAIIU	MG. FL.)	END OF I	MONTH	(COMPARISON WITH PREVIOUS YEARS)					
RESERVOIR	Usable	Usable Storage		age	· RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF			
	Capacity	This Year	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average i		
Phillips Lake Thief Valley	73.5 17.4	52.6 17.4	50.1	17.4 m	Burnt River Grande Ronde River	4	230	150		
Unity	25.2	24.5	16.7	19.5	above La Grande	4	395	150		
Wallowa Lake	37.5	18.0	15.1	23.4	Powder River Wallowa, Imnaha,	5	195	145		
					Catherine Creek	6	195	145		
				,	SOIL MOISTURE					
		1	1							

SOIL MOISTURE			
RIVER BASIN	Number		S MOISTURE CENT OF:
	Stations	Last Year	Average i
Burnt, Powder Grande Ronde, Catherine	2	105	120
Creek, Imnaha River	3	110	105

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

OREGON

as of

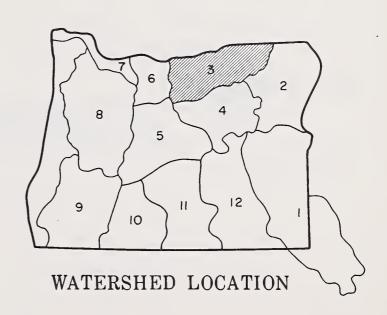
APRIL 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK FOR AREA III REMAINS EXCELLENT. THE SNOW-PACK IS NEARLY TWICE THE NORMAL AMOUNT, WITH MANY SNOW COURSES EXCEEDING THE HIGHEST WATER CONTENT ON RECORD. PRECIPITATION WAS SLIGHTLY ABOVE AVERAGE DURING MARCH AND SOIL MOISTURE CONDITIONS ARE NEAR AVERAGE. STORAGE RESERVOIRS WILL ALL FILL. STREAMFLOW WILL BE 20 TO 50% ABOVE NORMAL DURING THE SPRING AND SUMMER MONTHS.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	eriod
STREAM or AREA	Spring Season	Late Season
Walla Walla River, No. Fork	Excellent	Average
Walla Walla River, So. Fork	Excellent	
Walla Walla River, Main	Excellent	Average
Walla Walla River, Little	Excellent	Average
Couse Creek	Excellent	Average
Dry Creek	Excellent	Average
Pine Creek	Excellent	Average
Umatilla River, Main	Excellent	Average
Wildhorse Creek	Excellent	Average
Umatilla R. (Cold Springs	Excerrent	Average
Reservoir)	Arramaga	Arramaga
	Average Excellent	Average Excellent
Umatilla R. (McKay Res.) McKay Creek	Excellent	Excellent
Birch Creek	Excellent	
Butter Creek	Excellent	Average
Willow Creek		Average
	Excellent	Average
Rhea Creek	Excellent	Average
Rock Creek (John Day	F. 11	
Tributary)	Excellent	Average



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS		THIS YEA	PAST RECORD			
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i	
Birch Creek at Rieth	19.2	121	April-July		15.9	
Butter Creek near Pine City	11.0	145	April-July		7.6	
McKay near Pilot Rock	32	132	April-Sept.		24	
Umatilla near Gibbon	103	149	April-July		69	
	108	144	April-Sept.		75	
Umatilla at Pendleton	206	148	April-July		139	
	212	147	April-Sept.		144	
Walla Walla, South Fork near Milton	72	136	April-July		53	
,	88	133	April-Sept.		. 66	

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

TONEONS! DATE OF LOW	ILUM TAL	ULJ .		MESERAOIN STOUNDE C	ilousaliu	MU. IL.	ENDOF	MONTH	
FORECAST POINT	Low Flow Value Stream Will Average Date Of Low Flow			RESERVOIR Usable			Usable Storage		
TORECAST TORT	Second/Ft.	Recede to Low Flow Value	Value	NEGEN VOIN	Capacity	This Year	Last Year	Average i	
Umatilla at Pendleton	550	June 9	May 22	Cold Springs McKay	50.0 73.8	49.5 65.1	47.2 28.0	49.4 49.2	

SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS

		TILLE VE 4515	MOISTURE	(COMPARISON WITH PREVIOUS	YEARS)		
RIVER BASIN	Number of Stations	THIS YEAR'S as PERC Last Year	ENT OF:	RIVER BASIN and/or	Number of Courses	THIS YEA WATER AS I	R'S SNOW PERCENT OF
		Last Tear	Average i	SUB-WATERSHED	Averaged	Last Year	Average į
Umatìlla, Walla Walla, McKay Creek	3	100	95	McKay Creek Umatilla River Walla Walla River	3 3 2	365 425 355	160 200 195
	-						

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS

OREGON

as of

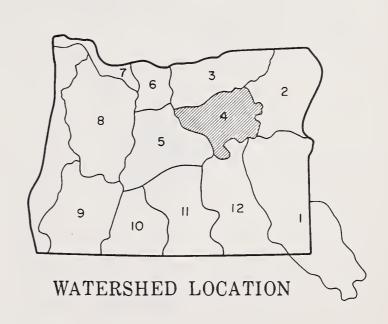
APRIL 1, 1974

GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR THE JOHN DAY. WITH THE SNOW-PACK AT 35 - 40% ABOVE NORMAL, STREAMFLOW VOLUMES ARE EXPECTED TO BE TWENTY-FIVE TO SIXTY-FIVE PERCENT ABOVE AVERAGE. MARCH PRECIPITATION AND SOIL MOISTURE WERE NEAR AVERAGE, AND RESERVOIR STORAGE WAS ABOVE AVERAGE.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow P	eriod
STREAM or AREA	Spring Season	Late Season
Beech Creek Beech Creek-Fox-Long Cr. Bridge-Mountain Creeks	Excellent Excellent Excellent	Average Average Average
Camas Creek Cherry Creek Indian-Pine Creeks	Average Average Excellent	Average Average Average
John Day River, Main Fork John Day River, Mid. Fork John Day River, N. Fork	Excellent Excellent Excellent	Average Average Average
John Day River, S. Fork Monument-Kimberly Strawberry Creek	Excellent Excellent Excellent	Average Average Average



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS		THIS YEA	R	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i	
Camas Creek near Ukiah	42 42	127 126	April-July April-Sept.		33 33	
John Day, Middle Fork at Ritter	157 165	150 152	April-July April-Sept.		105 108	
John Day, North Fork at Monument	860 890	164 165	April-July April-Sept.		525 540	
Strawberry near Prairie City	9.2 9.5	133 125	April-July April-Sept.		6.9 7.6	
			1			

SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN	Number of Stations	THIS YEAR'	THIS YEAR'S MOISTURE RIVER BASIN as PERCENT OF: and/or		Number of Courses Averaged	THIS YE WATER AS	AR'S SNOW PERCENT OF
	Stations	Last Year	Average :	SUB-WATERSHED	Averaged	Last Year	Average i
John Day above Dayville John Day, North Fork	6 2	130 115	105 105	John Day, North Fork John Day abv. Dayville	7 5	220 180	135 140
			:				
·	,						

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

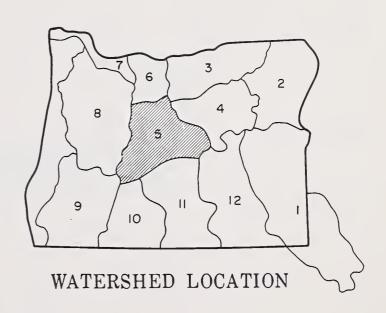
*as of*APRIL 1, 1974

GENERAL OUTLOOK

DESCHUTES AND CROOK COUNTY WATER USERS WILL HAVE ABUNDANT SUPPLIES DURING SPRING AND SUMMER OF 1974. THE SNOWPACK IS 50% ABOVE NORMAL WITH SNOW COURSES IN THE MT. BACHELOR AREA ESTABLISHING NEW RECORDS FOR MAXIMUM WATER CONTENT. PRECIPITATION FOR MARCH WAS 157% OF NORMAL AND STREAMFLOW VOLUMES ARE FORECAST AT 20-80% ABOVE AVERAGE. MOST STORAGE RESERVOIRS ARE EXPECTED TO FILL THIS SPRING.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

Arnold Irrigation Dist. Bear Creek Beaver Creek Camp Creek Central Ore. Irrig. Dist. Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Excellent Excel	
Bear Creek Beaver Creek Camp Creek Central Ore. Irrig. Dist. Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Average Excellent Exc	
Bear Creek Beaver Creek Camp Creek Central Ore. Irrig. Dist. Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Average Excellent Exc	ge
Beaver Creek Camp Creek Camp Creek Central Ore. Irrig. Dist. Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Excellent Average Average Average Average Excellent Exce	_
Camp Creek Central Ore. Irrig. Dist. Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Squaw Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Average Excellent Excel	_
Central Ore. Irrig. Dist. Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Squaw Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Excellent Excell	_
Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Excellent	ge
Hay-Trout Creeks Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Average Avera Excellent	_
Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Excellent Average Excellent Ex	len
Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Average Avera Excellent Excel	ge
Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Average Average Excellent Excellen	len [.]
Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Excellent	ge
Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Excellent	ge
Snow Creek Irrig. Dist. Squaw Creek Irrig. Dist. Swalley Ditch Tumalo Project Excellent Excell	ge
Squaw Creek Irrig. Dist. Excellent Excel: Swalley Ditch Excellent Excel: Tumalo Project Excellent Average	l en
Swalley Ditch Excellent Excel: Tumalo Project Excellent Average	len
Tumalo Project Excellent Average	l en
	len
	ge
·	ge
	,



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY......OREGON STATE ENGINEER

STREAMFLOW FORECASTS		THIS YEAR	PAST RECORD			
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average (
Beaver Creek near Paulina	27	172	April-July		15.8	
beaver creek hear raurina	27	170	April-Sury April-Sept.		16.0	
Crane Prairie Reservoir total Inflow	137	176	April-July		78	
orano i larrico mesorivari contar i miron	198	166	April-Sept.		119	
Crescent at Crescent Lake	30	163	April-July		18.4	
	34	154	April-Sept.		22	
Crooked near Post	117	128	April-July		91	
	118	129	April-Sept.		91	
Deschutes at Benham Falls	439	122	April-July		360	
	639	116	April-Sept.		550	
Deschutes below Snow Creek	114	184	April-Sept.		62	
Deschutes, Little near La Pine	130	178	April-July	28	73	
	140	171	April-Sept.	36	82	
Ochoco Reservoir net Inflow	23	122	April-Sept.		188	
Odell near Crescent	37	135	April-Sept.		28	
Squaw near Sisters	66	130	April-Sept.	33	50	
Tumalo near Bend	55	126	April-Sept.	31	44	

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

				HEDERITORI OTORNOE C.				
FORECAST POINT	Low Flow Value	Ju cam min	Average Date of Low Flow		Usable	l	Jsable Stora	ige
TORECAST TORET	Second/Ft.	Recede to Low Flow Value	Value	RESERVOIR	Capacity	This Year	Last Year	Average i
Crane Prairie net Inflow Crooked R. near Post Deschutes at Bend Little Deschutes near La Pine *Will not recede to low flow.	300 100 1500 400 200	* June 12 Sept. 29 July 1 Aug. 6	July 15 June 1 July 1 June 7 July 8	Crane Prairie Crescent Lake Ochoco Prineville Wickiup	55.3 86.9 47.5 153.0 200.0	41.2 82.7 43.8 148.8 185.7	55.9 87.8 28.3 131.3 200.3	44.8 50.4 30.9 123.4 187.8

SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

				(COMPARISON WITH PREVIOUS YEARS)			
RIVER BASIN	Number	THIS YEAR'S		RIVER BASIN and/or	Number of Courses	WATER AS	AR'S SNOW PERCENT OF
	Stations	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average
Crooked R., Upper Deschutes River	3	110	105	Crooked, Ochoco Deschutes abv. Wickiup Little Deschutes Tumalo & Squaw Crs.	4 3 4 3	155 250 250 290	120 160 155 165

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

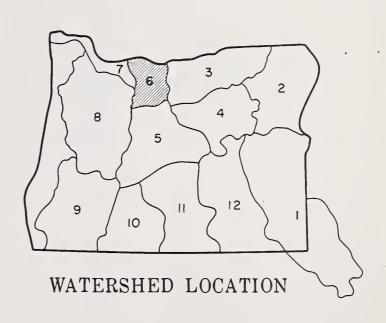
as of
APRIL 1, 1974

GENERAL OUTLOOK

A RECORD SNOWPACK IN THE MT. HOOD AREA WILL PROVIDE EXCELLENT WATER SUPPLIES FOR THE HOOD RIVER WATERSHEDS. THE SNOWPACK AVERAGES 80% ABOVE NORMAL WITH A RECORD 116.5 INCHES OF WATER SET AT PHLOX POINT NEAR TIMBERLINE LODGE. MARCH PRECIPITATION WAS 41% ABOVE NORMAL AND SPRING AND SUMMER STREAMFLOWS ARE FORECAST AT 145-200% OF AVERAGE.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
Aldridge Ditch (Tony Creek) Badger Creek Dee Irrigation Dist. East Fork Irrig. Dist Farmers Irrigation Dist. Hood River Irrig. Dist Juniper Flat Middle Fork Irrig. Dist. Mile Creeks Mill Creek Mount Hood Irrig. Dist. Rock-Gate-Threemile Crs. Tygh Creek White River	Excellent	Excellent



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS		THIS YEAR	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ¹
Hood River near Tucker Bridge	415	145	April-July		286
U 1 West Fork near Dec	483	146	April-Sept.		332
Hood, West Fork near Dee	189	144	April-July		132
White below Tygh Valley	222	144	April-Sept.		154
white below Tygh valley	234 263	198 197	April-July April-Sept.		118 133

FORECAST DATE of LOW FLOW VALUES

RESERVOIR	STORAGE	(Thousand	Ac.	Ft.)	END OF MONTH

FORECAST POINT	Low Flow	Forecast Date Stream Will	Average Date of Low Flow	DECEDIO	Usable	U	sable Stor	age
FORECAST POINT	Value Second/Ft.	Recede to Low Flow Value	Value	RESERVOIR	Capacity	This Year	Last Year	Average
Clear Branch Inflow	64*	July 15-31	39**	Clear Lake (Wasco)	11.9	4.8	7.2	3.8
*Average cfs forecast to flow for this two-week period.								
**Average cfs for period of record.								
			-					
			,	SUMMARY OF SNOW ME		NTS	•	
				RIVER BASIN and/or SUB-WATERSHED	Number Course Average		THIS YEA ATER AS P	R'S SNOW ERCENT O Average
				Hood River	6		415	190
				Mile Creeks White River	3 3		665 385	175 180
	,							
				-				

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

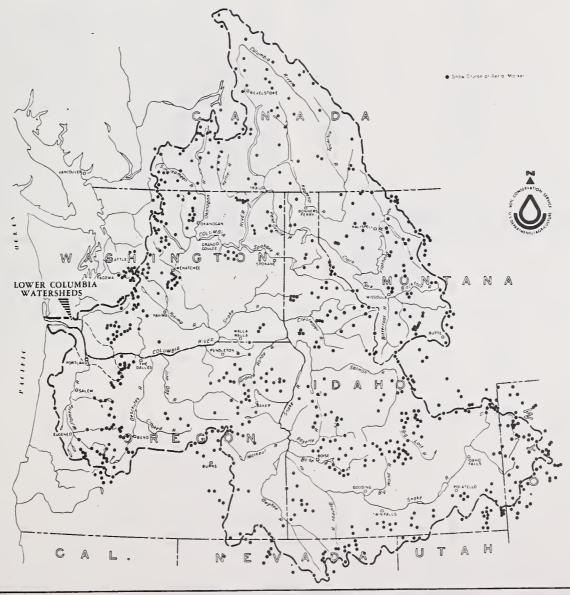
LOWER COLUMBIA WATERSHEDS

OREGON

*as of*APRIL 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IS EXCELLENT THROUGHOUT THE ENTIRE COLUMBIA BASIN. WATER SUPPLY FORECASTS NOW CALL FOR MUCH ABOVE AVERAGE RUN-OFF IN MOST TRIBUTARIES WITH MAXIMUM OF RECORD VOLUME FLOWS EXPECTED IN SOME AREAS. THE COLUMBIA RIVER AT THE DALLES, OREGON IS EXPECTED TO PRODUCE 132,000,000 ACRE FEET, OR A LITTLE LESS THAN 1972 WHICH WAS THE LARGEST RUNOFF SINCE 1916. THE CURRENT SNOWPACK IS 130 TO 200% OF AVERAGE IN THE BASIN. HEAVIEST AMOUNTS WERE MEASURED IN WASHINGTON, OREGON, SOUTHCENTRAL IDAHO, AND ON THE OKANAGON RIVER IN BRITISH COLUMBIA. WHILE REGULATED STAGES IN THE LOWER COLUMBIA ARE FORECAST BY THE NATIONAL WEATHER SERVICE, RIVER FORECAST CENTER TO BE SEVERAL FEET ABOVE FLOOD STAGE, THEY INDICATE THERE IS VIRTUALLY NO CHANCE OF MAJOR FLOODING ON THE LOWER MAIN STEM OF THE COLUMBIA.



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY...... ÓREGON STATE ENGINEER

Report prepared by

T.A. GEORGE and J.W. HAGLUND

SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST.
PORTLAND. OREGON 97205

SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or	Number of Courses		AR'S SNOW PERCENT OF
SUB-WATERSHED	Averaged	Last Year	Average 1
Sandy River	2	385	190

STREAMFLOW FORECASTS		THIS YEAR	R	PAST	RECORD
	FORE	CAST	FORECAST	THOUSAND	ACRE FEET
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ⁽
Columbia at The Dalles Sandy River near Marmot	95,000 132,000 489 544	130 126 143 137	April-June April-Sept. April-July April-Sept.	43,211 65,012	73,137 104,657 342 398

HISTORICAL DATA (Columbia River at The Dalles)

VEAD	,	STREAMFLOW d (1,000 A.F.)	REGULATED PEAK	
YEAR	APR.— SEPT.	APR. — JUNE	MAY - JUNE	(1,000 c.f.s)	DATE
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	.48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1968	89,000	55,500	47,900	404	June 13
1969	112,300	85,700	63,800	515	May 15
1970	88,100	62,800	55,200	425	May 28
1971	122,900	88,400	73,700	557	May 13
1972	134,700	96,400	81,400	619	June 20
1958-72 Avg.	104,300	72,900	59,900	529	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

				DRAINA	GE DISTRICT PUMI	PHOUSE		
VANCOUVER	FLOW AT	SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
GAGE	. THE DALLES		,	٠.	RIVER MILES			
(Weather Bu.)	(1,000 c.f.s)	118.9	96.0	91.0	77. 0	62.0	52.0	47. 0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	325	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0 .	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	. 897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.7	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
				-,,,	10.,			
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7
	uming normal meteor		I		•			1

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72. adjusted average. (i) 1958-72. 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

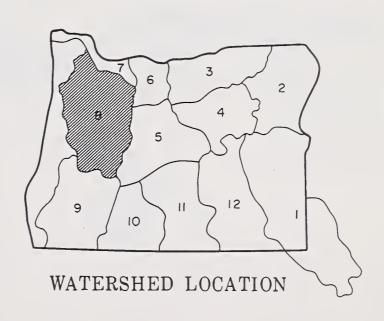
*as of*APRIL 1, 1974

GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR WILLAMETTE VALLEY WATER USERS. A RECORD SNOWPACK IN MANY AREAS OF THE CASCADES WILL YIELD SPRING AND SUMMER STREAMFLOW VOLUMES 20-40% ABOVE NORMAL. THE BASIN-WIDE PRECIPITATION AVERAGED 10.8 INCHES DURING MARCH, WHICH WAS 160% OF NORMAL FOR THE PERIOD. RESERVOIRS ARE NOW STORING ABOVE AVERAGE AMOUNTS DUE TO THE HIGH STREAMFLOW DURING MARCH.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

Calapooya Clackamas McKenzie Molalla Santiam, North Santiam, South Willamette, Coast Fork Willamette, Middle Fork Spring Season Excellent		Flow F	Period
Clackamas McKenzie Molalla Santiam, North Santiam, South Willamette, Coast Fork Excellent	STREAM or AREA		
Clackamas Excellent Excellent McKenzie Excellent Excellent Molalla Excellent Excellent Santiam, North Excellent Excellent Santiam, South Excellent Excellent Willamette, Coast Fork Excellent Excellent	Calapooya	Excellent	Excellent
Molalla Excellent Excellent Santiam, North Excellent Excellent Excellent Willamette, Coast Fork Excellent Excellent		Excellent	Excellent
Santiam, North Santiam, South Willamette, Coast Fork Excellent Excellent Excellent Excellent	McKenzie	Excellent	Excellent
Santiam, South Excellent Excellent Willamette, Coast Fork Excellent Excellent	Molalla	Excellent	Excellent
Willamette, Coast Fork Excellent Excellent	Santiam, North	Excellent	Excellent
	Santiam, South	Excellent	Excellent
Willamette, Middle Fork Excellent Excellent	Willamette, Coast Fork	Excellent	Excellent
	Willamette, Middle Fork	Excellent	Excellent



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

934 1055 725 831 595	Percent of Average 138 134 143 137	April-July April-Sept. April-July April-July April-July April-Sept.	THOUSAND A	Average 674 789
934 1055 725 831 595	138 134 143 137	April-July April-Sept. April-July	Last Year	674
1055 725 831 595	134 143 137	April-Sept. April-July		
1055 725 831 595	134 143 137	April-Sept. April-July		
725 831 595	143 137	April-July		/89
831 595	137			
595				506 604
	1 131	April-July		453
771				598
	1			1035
1661	132			1262
300	143			210
330	138	1 * · ·		239
180	146			123
226	140			162
135	138	April-July		98
139	136	April-Sept.		102
956	125	April-July		765
1061	122	April-Sept.		872
				563
	127	April-Sept.		623
	137		408	678
	133		491	779
				189
				209
				4397
6228	126	April-Sept.		4943
	771 1389 1661 300 330 180 226 135 139 956	771	771	771

SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

(COMPARISON WITH PREVIOUS YE		7100 45	1010 0110111	WESTKAOIK STORMOF (1				
RIVER BASIN and/or	Number of Courses	WATER AS	AR'S SNOW PERCENT OF	RESERVOIR	Usable	l	Jsable Stora	ige
SUB-WATERSHED	Averaged	Last Year	Average i	KESEKVOIK	Capacity	This Year	Last Year	Average &
Clackamas River McKenzie River Row River Santiam River Willamette, Mid. Fk.	2 3 2 4 5	845 335 295 570 260	225 175 170 170 150	Blue River Cottage Grove Cougar Detroit Dorena Fall Creek Fern Ridge Foster Green Peter Hills Creek Lookout Point Timothy Lake *Multiple purpose reservoirspace reserved primarily for flood runoff.	85.6* 30.0* 155.2* 299.9* 70.5* 115.0* 94.2* 30.0* 270.0* 200.0* 337.2* 61.7	53.5 15.3 94.1 188.4 38.8 71.1 83.9 15.1 188.4 128.8 200.5 48.2	45.4 21.6 56.9 110.7 50.7 63.4 68.2 16.7 150.8 85.1 65.8 55.5	16.6 74.3 ^m 177.6 38.4 73.8 ^m 72.9 9.0 ^m 164.7 ^m 121.1 ^m 173.5 52.8

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

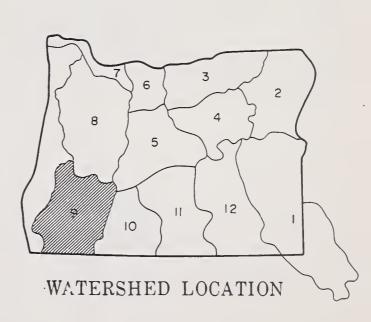
*as of*APRIL 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS NEAR AVERAGE IN THE ILLINOIS BASIN AND EXCELLENT THROUGHOUT THE REMAINDER OF THE ROGUE AND UMPQUA WATERSHEDS. THE SNOWPACK VARIES FROM 110% OF NORMAL IN THE ILLINOIS BASIN TO 190% IN THE NORTH UMPQUA. MARCH PRECIPITATION WAS 80% ABOVE AVERAGE FOR THE MONTH AND MOST STORAGE RESERVOIRS ARE FULL.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
Althouse Creek Applegate River, Big	Average Excellent	Average Average
Applegate River, Little Ashland Creek Butte Creek, Big	Excellent Excellent Excellent	Average Excellent Excellent
Butte Creek, Little Cow Creek Deer Creek	Excellent Average Average	Excellent Average Average
Elk Creek Emigrant Creek (abv. res.) Evans Creek	Average Average Average	Average Average
Gold Hill Irrigation Dist. Grants Pass Irrig. Dist. Grave Creek	Excellent Excellent Excellent	Average Average
Illinois River, East Fork Illinois River, West Fork Jump-off-Joe Creek	Average Average	Average Average
Neil Creek Red Blanket Creek Rogue River Sucker Creek	Average Excellent Excellent Average	Average Excellent Average Average
Table Rock Irrig. Dist. Thompson Creek	Excellent Average Excellent	Average Average
Wagner Creek Williams Creek	Average	Average Average



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORD
	FORE	CAST	FORECAST	THOUSAND A	ACRE FEET
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i
Applegate near Copper Clearwater above Trap Creek Fourmile Lake net Inflow Hyatt Reservoir net Inflow Illinois River near Kerby Little Butte, N. Fk. at Fish Lake nr. Lake Cr. Little Butte, S. Fk. near Lake Creek Rogue above Prospect Rogue, South Fork near Prospect Rogue at Raygold near Central Point Rogue at Grants Pass Umpqua, No. blw. Lemolo Res. nr. Toketee Falls	176 83 5.0 5.4 185 191 17.1 41 310 372 79 93 902 1092 980 215	132 119 117 117 97 97 125 146 121 120 130 130 123 123 110 130	April-Sept. April-Sept. April-Sept. April-July April-Sept. April-Sept. April-July April-July April-July April-July April-July April-July April-Sept. April-July April-Sept. April-July April-Sept. April-Sept. April-Sept. April-Sept.		133 69 4.3 4.6 191 197 13.7 28 256 311 61 72 735 890 890 166

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STORAG	(Thousand Ac	c. Ft.)	END OF MONTH
------------------	--------------	---------	--------------

		T = -	,	WESEKANIK SINKARE (nousanu	AU. IL.) END OF	F MONTH
FORECAST POINT	Low Flow Value	Forecast Date Stream Will Recede to Low	Average Date of Low Flow	RESERVOIR	Usable		Jsable Sto	rage
	Second/Ft.	Flow Value	Value		Capacity	This Year	Last Year	Average i
Little Butte Creek, South Fork Rogue at Raygold	100 1200 *2410 *1540	May 31 Oct. 12 July 1 Aug. 15	May 27 Aug. 7	Emigrant Lake Fish Lake Fourmile Lake Howard Prairie Hyatt Prairie	39.0 8.0 16.1 60.0 16.1	39.0 5.3 b 60.6 15.7	31.4 7.6 44.0 10.2	5.7 9.7
*Average daily cfs forecast to flow on this date.			÷	*Average for years of record (in base period) after reconstruction. SUMMARY of SNOW ME	ASUREMI	ENTS		
				RIVER BASIN and/or SUB-WATERSHED	Numbe Cours Avera	es W		ERCENT OF
				Applegate Bear Creek Butte Creek Illinois River North Umpqua Rogue River	3 2 4 3 3 6		205 230 185 160 370 175	Average i 145 170 145 110 190 120

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS

OREGON

as of

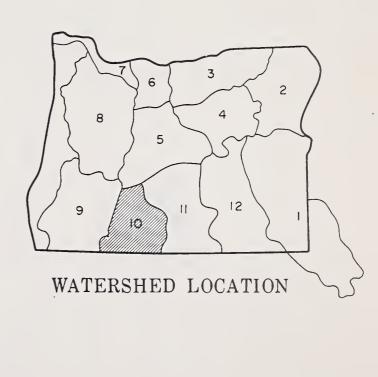
APRIL 1, 1974

GENERAL OUTLOOK

AN EXCELLENT WATER SUPPLY IS EXPECTED FOR THE KLAMATH COUNTY AREA. THE SNOWPACK IS 135% OF AVERAGE AND RESERVOIR STORAGE IS NEAR 125% OF NORMAL. TWICE THE NORMAL AMOUNT OF PRECIPITATION FELL DURING MARCH, MAINTAINING THE EXCELLENT SOIL MOISTURE. SPRING AND SUMMER STREAMFLOWS SHOULD BE 20 TO 30% ABOVE AVERAGE THROUGHOUT THE BASIN.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow P	eriod
STREAM or AREA	Spring Season	Late Season
Ft. Klamath Valley Lost River (Clear Lake) Lost River (Gerber) Lost River (Willow Res.) Sprague River Upper Klamath Lake Williamson River	Excellent Excellent Excellent Excellent Excellent Excellent Excellent	Average Average Average Average Average Average



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

BASIN, STREAM and/or FORECAST POINT Clear Lake Reservoir Inflow Gerber Reservoir Inflow Sprague near Chiloquin Spper Klamath Lake net Inflow Silliamson below Sprague River		THIS YEA	R	PAST	RECORD	
	FORE	ECAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average 1	
Clear Lake Reservoir Inflow	51 54	128 128	April-July	22 29	40 42	
Gerher Reservoir Inflow	25	132	April-Sept. April-July	7.7	18.6	
delber keserverr imriow	25	132	April-Sept.	8.0	18.9	
Sprague near Chiloquin	255	120	April-July		212	
	290	120	April-Sept.	40.5	242	
Upper Klamath Lake net Inflow	555 700	125	April-July April-Sept.	495 599	445 536	
Williamson below Sprague River	538	130	April-Sept.	333	414	
Williams on below opingue River			1.7111			

SOIL MOISTURE

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RIVER BASIN	Number	THIS YEAR'S	MOISTURE ENT OF:	RESERVOIR	Usable	L	sable Sto	rage
	Stations	Last Year	Average i	RESERVOIR	Capacity	This Year	Last Year	Average 1
Upper Klamath	1	135	110	Clear Lake Gerber Upper Klamath Lake	94.0	362.1 86.2 520.7	323.0 68.6 495.2	248.9 58.8 475.4
				SUMMARY OF SNOW ME (COMPARISON WITH PREVIOUS RIVER BASIN and/or SUB-WATERSHED		of WA	THIS YEA TER AS P	R'S SNOW ERCENT OF
				Lost River Sprague River Upper Klamath Williamson River	4 3 8 3	1 2	225 175 200 270	140 125 135 145
	:							

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS

OREGON

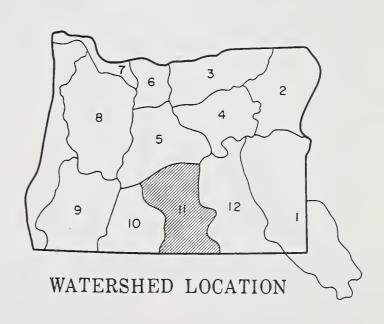
*as of*APRIL 1, 1974

GENERAL OUTLOOK

ABOVE AVERAGE WATER SUPPLIES ARE IN PROSPECT FOR LAKE COUNTY WATER USERS. THE SNOWPACK VARIES FROM SLIGHTLY BELOW AVERAGE IN THE SILVER CREEK WATERSHED TO 35% ABOVE AVERAGE IN THE TWENTYMILE CREEK AREA. PRECIPITATION FOR MARCH WAS 2 1/2 TIMES NORMAL AND STORAGE RESERVOIRS ARE NEAR MAXIMUM STORAGE. WITH ABOVE AVERAGE SOIL MOISTURE CONDITIONS, EXCELLENT STREAMFLOW VOLUMES ARE ANTICIPATED.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
Chewaucan River Crooked Creek Deep Creek Dry Creek East Side Goose Lake Guano Lake Honey Creek Lakeview Water Users Assn. Rock Creek (Hart Mountain) Silver-Buck Creeks Summer Lake Thomas Creek Twentymile Creek Warner Lakes	Excellent Average Excellent Average Excellent Average Average Average Average Excellent Average Excellent Average	Average



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY......OREGON STATE ENGINEER

Report prepared by

T.A. GEORGE and J.W. HAGLUND SOIL CONSERVATION SERVICE 1218 S.W. WASHINGTON ST. PORTLAND. OREGON 97205

STREAMFLOW FORECASTS		THIS YEA	R	PAST RECORD			
	FOR	ECAST	FORECAST	THOUSAND A	CRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average		
Chewaucan near Paisley	106	140	April-July	44	75		
Darm all ann Adad	108	136	April-Sept.	47	79		
Deep above Adel	79	120	April-July	44	66		
D D	82	121	April-Sept.	46	68		
Drews Reservoir net Inflow	29	109	April-July		27		
Honey Creek near Plush	20	118	April-July	10.5	17.0		
0:1	20	118	April-Sept.	10.7	17.2		
Silver Creek near Silver Lake	16.0	117	April-July		13.7		
m - 4 - 1 1	16.3	116	April-Sept.		14.1		
Twentymile near Adel	26	140	April-July	14.0	18.6		
	28	146	April-Sept.	14.3	. 19.1		
		ŀ					
	,						
		Ì					
		1					
		1					

SOIL MOISTURE

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

DIVER BASIN	Number	THIS YEAR'	S MOISTURE ENT OF:	RESERVOIR	Usable		Usable Stora	ige
RIVER BASIN	Stations	Last Year	Average i	KESEKVOIK	Capacity	This Year	Last Year	Average i
Chewaucan, Silver Creek, Drew Creek Honey, Deep, 20-Mi. Cr.	1 1	135 105	110 105	Cottonwood Drews *Average for years of record (in base period) after reconstruction.	8.7 63.0	8.4 63.0		5.3* 46.5
			-	COMPARISON WITH PREVIOUS RIVER BASIN and/or SUB-WATERSHED Chewaucan River Deep Creek Drew Creek Honey Creek Silver Creek Twentymile Creek		er of v	THIS YEAR WATER AS PELAST YEAR 175 115 125 585 125	'S SNOW RCENT OF Average i 125 125 115 115 90 135

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS

OREGON

as of

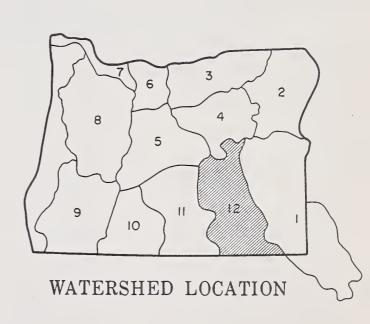
APRIL 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IS EXCELLENT IN THE SILVIES RIVER WATERSHED AND NEAR AVERAGE THROUGHOUT THE REMAINDER OF THE HARNEY BASIN. FORECASTED STREAMFLOWS VARY FROM NORMAL ON THE DONNER UND BLITZEN TO 60% ABOVE NORMAL ON THE SILVIES. THE SNOWPACK REMAINS SLIGHTLY ABOVE AVERAGE EXCEPT FOR THE HIGH AMOUNTS IN THE STRAWBERRY RANGE. PRECIPITATION DURING MARCH WAS NEARLY TWICE THE NORMAL AMOUNT AND THE SOIL MOISTURE REMAINS NEAR AVERAGE.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow	Period
STREAM or AREA	Spring Season	Late Season
Catlow Valley	Average	Average
Cow Creek	Average	Average
Donner und Blitzen River	Average	Average
Mill-Coffeepot Creeks	Average	Average
Rattlesnake Creek	Average	Average
Silver Creek	Average	Average
Silvies River	Excellent	Average
Soldier-Prather Creek	Average	Average
Trout Creek	Average	Average
Whitehorse Creek	Average	Average



U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

Report prepared by

T.A. GEORGE and J.W. HAGLUND

SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST.

PORTLAND, OREGON 97205

STREAMFLOW FORECASTS		THIS YEAR	R	PAST	RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ¹		
Donner und Blitzen near Frenchglen	49	102	April-July		48		
	53	101	April-Sept.		53		
Silver near Riley	18.4	118	April-July		15.6		
Silvies River near Burns	116	159	April-July	21	73		
Trout Creek near Denio	118	160 120	April-Sept.	22	74		
Trout Creek hear benro	9.0	120	April-July April-Sept.		7.5 7.9		

SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

Number of	THIS YEAR'S as PERCI	MOISTURE ENT OF:	RIVER BASIN and/or	Number of Courses	THIS YE	AR'S SNOW PERCENT OF
Stations	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average i
3	105	105	Donner und Blitzen R.	4	95	110
			Silver Creek	3	130	95
1	95	110	Silvies River	4	180	145
			Trout Creek	3	50	115
		-				
					1	
		/	-			
-						
			·			
	of Stations	of Stations Last Year 3 105	of Stations as PERCENT OF: Last Year Average i 3 105 1 95 110	of Stations Average i SUB-WATERSHED 3 105 105 Donner und Blitzen R. Silver Creek Silvies River Trout Creek	of Stations	of Stations

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

APRIL 1, 1974

SNOW	TH	IIS YE	AR	PAST	REC.	SNOW	TI	HIS YE	AR	PAST	RE
DRAINAGE BASIN and/or SNOW COURSE	Date of	Snow Depth		(inc	Content hes)	DRAINAGE BASIN and/or SNOW COURSE		Snow Depth	Water Cont.	Water (
	Survey	1	(ln.)	Last Yr.	Ave.2		Survey	1		Last Yt.	A
OWYHEE, MALHEUR						BURNT, POWDER, PIN IMNAHA WA			RONDI I	Ξ,	
Antelope Ridge (Ida.) Battle Creek ^e (Ida.)	3/29 3/26	22 T	7.0 T	6.7	1 1	Aneroid Lake #1	3/29	147	58.4	27.4	37
Bear Creek (Nev.)	3/27		20.9		21.0	Aneroid Lake #2	3/28	123	51.6	24.4	33
Big Bend (Nev.)	3/21		11.2		1 1	Anthony Lake	3/28			18.8	
Blue Mountain Springs	3/29	64			15.6	Bald Mountain (Ore.)	4/4			16.8	1
lue Mtn. Springs Pillow* uck Pasture.	3/29 3/26	0	21.0	8.7	-	Beaver Reservoir (Rev.) 1/Big Sheep e	3/28		17.5 42.0	6.7	12
uckskin, Lower (Nev.)	3/27	16		8.3		Blue Mtn. Summit	3/28		10.7	5.3	
uckskin, Upper (Nev.)	3/27	22			10.4	Bourne	3/27		21.9	9.6	4
ull Basin ^e (Ida.)	3/26		0.0	0.0			3/28			1.5	
ully Creek	3/26		0.0	0.0	1.0 h		3/25		10.3	5.6	
all Meadow e.	3/26		2.2	1.1	3.1 ^m 5.9 ^h		3/26 3/29	41	16.2	7.1	
olumbia Basin ^e (Nev.) ottonwood-Indian ^e	3/31 3/26		6.5	11.9	0.1h		3/29	1	16.8	0.0	
rane Prairie	3/29		11.8		1 '	Goodrich Lake	3/28			28.6	
isaster Peak (Nev.)	3/26				10.8	Intake House	3/26	41	14.4		1
ldorado Pass	3/29	1	ı			Little Alps .	3/28		20.2	8.2	
awn Creek (Nev.)	3/31	20		13.2		Little Antone	3/28	1	5.4	T	1
ish Creek	3/31	73		26.3		Lucky Strike	3/28 b	3/	13.4	8.2	1
ish Creek Pillow* ish Creek ^e	3/31 3/26	60		26.7	23.4	Lucky Strike Pillow* Meacham	3/27	1 44	18.2	2.2	
lag Prairie	3/26		T	0.0	2.8	Mirror Lake e	3/2/	77	10.2	52.6	
ox Creek (Nev.)	3/27	23	_	11.7	1 .	Moss Spring	4/4	89	33.6	17.2	2
ry Canyon (Nev.)	3/21	18	6.8	8.5	5.3	Power Plant	3/26		4		
old Creek (Nev.)	3/21	14				Schneider Meadow	3/25			28.1	
ranite Peak (Nev.)	3/28				15.4 ^h		3/28	6		1.0	7
yde Pasture (Ida.)	3/26	1				Standley e	4/4	62	27 2	28.9	1
ack Creek, Lower (Nev.) ack Creek, Upper (Nev.)	3/27 3/27		0.0 9.2		10.0	Taylor Green Tipton	3/28		14.8		4
ack Peak (Nev.)	3/27		25.1		24.6 ^h		3/28		19.7	9.8	1
ake Creek R. S.	3/29		13.6	6.6	8.9	Tollgate	3/27	102	48.4	15.0	2
aurel Draw (Nev.)	3/29					TV Ridge e	4/3	84	31.0	16.4	2
ogan Valley	3/26										
ookout Butte	3/26	1	1					Ì			
ouse Canyon Martin Creek (Nev.)	3/26 3/28										
Merritt Mountain (Nev.)	3/31						1				
lidas (Nev.)	4/2	5	0.5		2.7						
fud Flat (Ida.)	3/29				4.4	UMATILLA, WALLA WALL	LA. WI	LLOW	. ROC	K.	
regon Canyon	3/26			10.5		LOWED TOUR DAY				,	
Quinn Ridge (Nev.)	3/26		1				3/27	1 32	13 2	7.0	1
Red Canyon (Ida.) Rock Spring	3/28					Arbuckle Mtn. Pillow*	3/27			16.5	
odeo Flat (Nev.)	3/21					Battle Mountain Summit	3/29			0.0	
6 Creek (Nev.)	3/27	35	12.9	12.1	$ 11.6 ^{h}$	Blue Mountain Camp	3/27		28.0		1
ilver City (Ida.)	3/28				15.1	Butte Creek Summit	4/1	0		l .	
ilvies	3/31				13.1	Emigrant Springs	3/27 3/26		6.2 32.3		
ilvies Pillow*	3/31 3/26			16.8	9.4	High Ridge Pillow* Lucky Strike	3/28		13.4		
ilvies outh Mountain #2 (Ida.)	3/28				11.8		b	"		5.1	
tag Mountain (Nev.)	3/31				$ 3.7^{h}$	Meacham	3/27		18.2	2.2	
tinking Water	3/27		1		0.8	Tollgate	3/27	102	48.4	15.0	2
uccor Creek (Ida.)	3/28										
aylor Canyon (Nev.)	3/27										
oe Jam (Nev.)	3/31			14.2							
remewan Ranch (Nev.) riangle (Ida.)	3/21 3/26				1 1						
rout Creek	3/26			15.7	7.3^m						
'V'' Lake	3/26			11.9	5.0						
Vaught Ranch (Ida.)	3/26	0	0.0	0.8	1.3						
War Eagle (Ida.)	3/26	60	24.0	25.1	22.2						
•											
		<u> </u>	L				L				L

BASIC DATA SUPPLEMENT 1 APRIL 1, 1974

SNOW	ТНІ	S YE	AR	PAST	REC.	SNOW	TH	HIS YE	AR	PAST	REC.
DRAINAGE BASIN and/or SNOW COURSE		Depth	Water Cont (In.)	Water ((inc Last Yr.		DRAINAGE BASIN and/or SNOW COURSI	Date of Survey	Snow Depth (In.)		Water ((inch Last Yr.	ontent nes)
UPPER JOHN DAY	WATER	SHED I	S			HOOD, MILE CREEKS, WATERS		DES	CHUTE	S	
Anthony Lake Arbuckle Mountain Arbuckle Mt. Pillow* Battle Mountain Summit Beech Creek Summit Blue Mountain Springs Blue Mt. Springs Pillow* Blue Mountain Summit Butte Creek Summit Derr Gold Center Indian Creek Butte Izee Summit Lucky Strike Lucky Strike Pillow* Marks Creek Ochoco Meadows Olive Lake Schoolmarm	3/29 3/28 4/1 3/26 3/27 3/26 3/30 3/28 6 3/29 3/28 4/4 3/28	32 T scon: 64 32 0 34 42 78 24 37 T 33	35.3 13.2 31.1 T inue 24.6 21.0 10.7 0.0 12.9 16.8 30.4 7.8 13.4 • T 11.6 29.6 1.9	7.0 16.5 0.0 1 11.8 8.7 5.3 0.0 7.5 8.5 22.1 6.2 8.2 5.1 0.0 6.4	1.2 ^h 15.6 7.5 9.0 12.5 23.1 ^m 6.7 13.0 1.7 8.6 21.1	Brooks Meadows Clear Lake Clear Lake (Experimental) Cooper Spur (Revised) Greenpoint Knebal Springs Mt. Hood Test Site Parkdale Red Hill Still Creek	3/26 3/25 3/27 4/3 3/31 3/26 3/26 c 4/2 3/25	50 73 56 73 28 194 108 109 71	30.0 21.1 29.8 11.8 95.8 83.8 47.8 49.7 30.0 74.9	1.8 6.3 4.7 6.4 1.2 30.8 21.2 10.0 10.5 6.2	65.0 41.6 24.1 13.1 42.1 3.0
Snow Mountain Snow Mt. Pillow** Starr Ridge Tipton Tipton Snow Pillow*	3/28 3/22 3/28 3/28 3/28	17 39	13.8 16.7 6.0 14.8 19.7	10.6 6.4 2.8 7.6 9.8	 3.9 9.5	Cascade Summit	3/29	113	43.9 54.8		
Williams Ranch			inue			Clackamas Lake Clear Lake Clear Lake (Expt.) Dead Horse Grade Detroit (Town) Detroit Dam Fawn Meadow	4/2 3/25 3/25 3/31 3/28 3/28	57 50 73 65 0	22.3 20.3 30.0 28.7 0.0 0.0 45.2	1.6 1.8 6.3 9.1 0.0 0.0	11.7 8.9 15.2 17.3 0.0
UPPER DESCHUTES, CROC			SHEDS			Golden Curry Creek Hogg Pass Lake Harriet	3/28 3/28 b		65.3	_	3.4 41.1 0.0
Bald Peter Caldwell Ranch Cascade Summit Chemult Chemult Alternate Derr Hogg Pass Hungry Flat Irish-Taylor Pillow** Lionshead * Marks Creek New Crescent Lake New Dutchman Flat #2 Ochoco Meadows Racing Creek Snow Mountain Snow Mt. Pillow** Tamarack Tangent Three Creek Butte Three Creek Meadow Three Creek Mdw. Pillow** Waldo Lake Whitewater Meadow * Willamette Pass Willamette Pass Pillow**	4/1 3/28 3/29 3/29 3/26 3/28 3/29 3/14 b 3/29 3/27 3/30 3/28 4/1 3/28 3/29 3/29 3/29 3/29 3/29 5 3/27	43 113 34 42 34 152 15 T 61 190 33 85 42 10 88 42 71	14.6 43.9 9.7 13.5 12.9 65.3 7.6 59.9 T 23.7 80.7 11.6 29.8 13.8 16.7 3.5 41.6 15.7 28.9	18.1 5.1 6.4 7.5 17.8 0.0 24.9 - 0.0 5.7 32.8 6.4 6.8 10.6 6.4 1.5 12.9 2.3 7.6 11.1 17.6 	7.3 28.8 7.1 9.0 41.1 2.2 38.0 1.7 13.0 51.0 8.6 12.6 8.2 18.3	Laurel Mountain Layng Creek Lemiti Meadow Lookout Point Dam Lost Creek Ranch Lund Park Marion Forks Marys Peak (Revised) McCredie Springs McKenzie McKenzie Bridge Mill City Mt. Hood Test Site** Oakridge Olallie Meadow Peavine Ridge Pillow** Power Line	3/29 3/28 4/2 3/29 3/31 3/28 3/29 3/31 3/31 3/28 3/26 3/29 4/2 3/27 4/3 3/29 3/22 3/29 3/28 3/28	0 105 0 0 0 54 23 0 0 165 0 0 130 112 0 0 78 0 0 120 0 36 0 0	39.0 0.0 0.0 0.0 24.6 11.0 0.0 73.7 0.0 95.8 0.0 54.0 36.2 44.6 0.0 16.9 23.8 41.1 4.2 47.8 49.7 29.9 0.0 0.0 47.7 0.0 16.1 0.0	0.0 0.0 0.0 0.0 0.0 0.0 26.4 0.0 30.8 0.0 4.9 15.7 0.0 0.1 5.9 5.2 0.0 10.5 5.1 0.0 0.0 17.6 0.0 0.0 0.0	0.0 25.8 0.0 2.2 0.0 11.7 12.4 0.0 43.5 0.0 0.1 65.0 0.0 16.3 22.4 0.4 15.4 21.6 24.1 0.0 31.0 0.2 6.1

APRIL 1, 1974

SNOW	TH	IIS YE	AR	PAST	REC.	SNOW	TI	HIS YE	AR	PAST	REC
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Cont		Content hes)	DRAINAGE BASIN and/or SNOW COURSE		Snow Depth	Water Cont. (In.)	Water ((incl Last Yr.	
DOGER INDOM				<u> </u>			T		(117.7)	Yr.	Ave
ROGUE, UMPQUA Althouse (Revised) $\frac{1}{2}$	3/29	l .	10.0	7.2	7.5	KLAMATH WA	,		75 0	37.4	4.5
Annie Spring	4/5	186	75.9	37.4	45.9	Billie Creek Divide	3/27	71	28.4	16.5	20.
Beaver Dam Creek Big Red Mountain	3/29		18.7		$\begin{vmatrix} 11.4^{h} \\ 30.3 \end{vmatrix}$	Chemult (Alternate)	3/29 3/29		9.7		7.
Billie Creek Divide	3/27	71	28.4	16.5	20.7	Chiloquin (PP&L)	3/31	0	0.0		
Caliban Caliban (Alternate)			55.0		32.8	Cold Springs Camp Cold Spgs. Camp Pillow**	3/22		1	25.3 25.9	34.
Champion		129	54.8	18.7	29.2	Crazyman Flate	4/2		16.0		9.
Cold Springs Camp	3/22 3/22			25.3 25.9	$ 34.7^{h} $		4/2	6	1.9	0.0	
Cold Spgs. Camp Pillow** Deadwood Junction	3/29		6.5	1		Crystal (PP&L) Diamond-Crater Sum (Rev) $\frac{1}{}$	3/30 3/25	8 112	4.3	4.7 20.0)
Diamond-Crater Sum. $(Rev)^{\frac{1}{2}}$	3/25	112	45.9	20.0	31.4h	Diamond Lake Junction (97)	3/25	8	3.1	T	4.
Diamond Lake Fish Lake	3/25		18.1		$ 21.2 $ $ 11.4^{h}$	Dog Hollow Finley Corrals e	4/2	54	1.6	0.0	
Fourmile Lake	3/27	70	28.4	18.8	25.1 h	Fort Klamath (PP&L)	4/1	0	0.0	0.5	1.
Grayback Peak Howard Prairie Reservoir	3/26 3/29		28.9 $ 10.1 $	16.9	26.2 6.7 h	Fourmile Lake Gerber	3/27	70	28.4	18.8	
Hyatt Prairie	3/29	18	6.9	5.6	6.3^h	Harriman (PP&L)	4/1	Т	T	1	1.
King Mountain #1 King Mountain #2	3/29 3/29		10.6	6.2	I		3/29 3/29		10.1	6.7	1
King Mountain #2	3/29			0.3	0.3 m	Kirk. (PP&L)	3/ 29 b	10	0.9	0.0	
King Mountain #4	3/29			0.0	0.0^m	Lake of the Woods	3/27	1	11.2	ł	
King Mountain #5 King Mountain #6	3/29 3/29			0.0	0.0^{m}	Park Headquarters Quartz Mountain	4/5 3/29		1.3	47.4	
Little Red Mountain	3/28	98	38.1	16.3	24.5	Seven Lakes #2	3/26	130	51.8	31.9	42
Mt. Ashland Switchback Mule Creek	3/28				$\begin{vmatrix} 33.2 & h \\ - & - \end{vmatrix}$	Seven Mile State Line e (Calif.)	3/27 4/2		42.5		
North Umpqua	3/28	66	26.3	5.8	12.2	Strawberry	3/31	24	7.9	7.0	6
Page Mountain Park Headquarters	3/29				3.6	Strawberry ^e Summer Rim	3/31 3/28		7.7	4.0	
Red Butte #1	3/28	60	25.1	8.9	15.0 m	Summer Rim Pillow*	3/28		25.7	10.9	-
Red Butte #2 Red Butte #3	3/28		10.7		9.0 ^m 6.4 ^m	Summer Rim ^e Sycan Flat ^e	4/2	66		13.8	
Red Butte #4	3/28	T	Т	0.0	2.8 m	Taylor Butte	3/21				
Red Butte #5	3/28	0 0									
Red Butte #6 Seven Lakes #2				31.9							
Seven Mile	3/27	106	42.5	25.8							
Silver Burn Siskiyou Summit (Rev.) 1/	3/27 3/28		18.5		10.9	LAKE COUNTY, GOOSE	IAKE	U WATE	I RSHFD!	l S	
Ski Bowl Road	3/28	120	44.6	20.0	27.6 h		1	1	1	1	1,2
South Fork Canal Frap Creek			0.0		9.0	Adin Mountain (Calif.) Bald Mountain (Nev.)	3/27	20		14.1 5.2	
Whaleback					32.5	Bear Flat Meadow ^e	4/2	34	12.6	8.6	10
						Camas Creek Cedar Pass (Calif.)	3/29 3/19		10.4	8.3	
		i				Colvin Creek e	4/2	12	3.8	3.7	4
						Cox Flat e (Calif.)	4/2	12	3.8		
						Dismal Swamp e (Calif.)	4/3	59	24.2	18.9	18
	,					Finley Corrals ^e Hart Mountain ^e	4/2			14.4	
						Little Bally Mtn. (Nev.)	4/2	6	1.9	3.4	1
						Mt. Bidwell (Calif.) North Star (Calif.)	3/27			25.8 16.3	
						Patton Meadows e	4/2	60	24.6	15.7	17
						Quartz Mountain	3/29				
						Sherman Valley ^e Silver Creek	3/26		1		1
						State Line e (Calif.)	4/2	30	11.1	6.4	7
						Strawberry Strawberry e.	3/31				
						Summer Rim	3/28	60	24.7	13.0	17
•						Summer Rim Pillow* Summer Rim e	3/28	66	25.7	10.9	17
						Sycan Flat e	4/2	12	3.8	1.1	4
						Willow Creek e	4/2	6	1.9	2.0	2

WONS	THIS YEAR PAST REC.					SNOW	THIS YEAR PAST REC.					
RAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)			Content hes) Avei	DRAINAGE BASIN and/or SNOW COURS	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water ((incl Last Yr.	ontenes)	
HARNEY BASIN	WATER	SHEDS	5									
Blue Mountain Springs Blue Mtn. Springs Pillow* Buck Pasture e Buckskin Lake e Call Meadows e Delintment Lake Denio Creek e Disaster Peak (Nev.) Emigrant Butte Fish Creek Fish Creek Pillow* Fish Creeke Hart Mountain e Idlewild Camp Idlewild Camp Idlewild Camp Idlewild Camp Isee Summit Lake Creek R. S. Oregon Canyon e Rock Spring Silvies Silvies Fillow* Snow Mountain Snow Mountain Snow Mountain Fillow** Starr Ridge Stinking Water Trout Creek e ''V'' Lake e	3/29 3/29 3/26 3/26 3/28 3/26 3/28 3/26 3/28 3/31 3/31 3/29 3/29 3/30 3/29 3/28 3/23 3/28 3/22 3/28 3/27 3/26 3/28	64 0 0 6 19 0 34 0 73 60 4 14 0 24 39 10 13 27 42 17 0 21	24.6 21.0 0.0 0.0 2.2 5.8 0.0 14.2 0.0 28.9 28.8 24.0 7.8 13.6 4.4 4.8 11.9 28.8 13.8 16.7 6.0 0.0 9.2	0.0 0.0 1.1 4.2 0.0 12.1 0.0 26.3 26.7 24.1 1.8 0.0 0.0 6.2 6.6 10.5 4.0 13.9 16.8 10.6 6.4 2.8	1.9 0.0 3.1 6.0 0.2 10.8 1.6 25.4 23.4 1.1 3.6 6.7 8.9 4.1 4.0 13.1 12.6 3.9 0.8 7.3							
*Manometer R **Telemetry R 1/Location ha been revise	leadin s bee	g. n cha	anged	sur	veys a	re made on an alternite site	and d	ata :	has			
						·						
flow. (e) Aerial s (h) 1958-72 adjus	snow de tedave	pth go age.	ige, wo (i) 195	iter con 58-72, 1	tent est 5 year	No report. (c) Not scheduled. (d) Co imated. (f) Nearest current data. (g) werage. (j) Telephonic report – data age for 5 or more years in base period.	Partly e.	stimat	ed.			

APRIL 1, 1974

SOIL MOISTURE

DRAINAGE BASIN and/or STA			e (Inches)	Date of Survey	This	Moisture (Inc	
in ame	Elevation	Depth	Capacity		Year	Year	Average
	OWYHEE, MA	LHEUR WA	rersheds				
Bear Creek (Nev.)	7800	72	16.8	3/27	10.5	9.6	11.5
Big Bend (Nev.)	6700	48	16.7	3/21	16.7	12.0	15.0
Blue Mountain Spring	5900	42	16.9	3/29	12.2	6.6	
	6800	48	8.6	3/29	12.2		11.5
Jack Creek, Lower (Nev.)	4390	48	19.3	7/20	15.6	16.5	7.9
Jordan Valley	5500	48	12.8	3/28	15.6	16.5	16.2
Mud Flat (Ida.)	6800		11.0	7/01	7 0	11.2	13.3
Rodeo Flat (Nev.)	6200	42	1	3/21	7.8	4.1	8.4
Taylor Canyon (Nev.)	6200	48	15.1	3/27	15.1	12.6	12.9
DUDNE	POWDER, PINE, GR	ANDE DON	DE TANIAUA	WATEDSHE	ns		
BURN I,	POWDER, PINE, GR	ANDE KON	DE, IMNAHA	WAIERSHE			
Blue Mountain Summit	. 5100 5430	36 36	16.8 9.2	3/28 3/25	13.3	9.8	12.1 4.9
Oooley Mountain						l .	
Emigrant Springs	3925	48	22.3	3/27	21.3	21.1	21.0
Ladd Summit	3730	48	18.9	3/28	13.8	10.3	11.8
loss Springs	5850	36	25.8	4/4	15.8	14.5	15.0
ollgate	5070	48	23.6	3/27	16.6	17.2	18.9
UMATILLA, W	ALLA WALLA, WILL	OW, ROCK	LOWER JO	HN DAY WA	TERSHEDS		
					1	1.7.5	
attle Mountain Summit	4340	48	13.8	3/29	13.7	13.7	13.4
migrant Springs	3925	48	22.3	3/27	21.3	21.1	21.0
ollgate	5070	48	23.6	3/27	16.6	17.2	18.9
	UPPER JOHN	DAY WAT	ERSHEDS				
Battle Mountain Summit	4340	48	13.8	3/29	13.7	13.7	13.4
Beech Creek	4800	48	21.3	D I S	CONT	INUED	
Slue Mountain Spring	5900	42	16.9	3/29	12.2	6.6	11.5
lue Mountain Summit	5100	36	16.8	3/28	13.3	9.8	12.1
err	5670	24	9.0	3/26	8.7	7.9	8.5
farks Creek	4540	36	14.1	3/29	13.6	10.3	13.0
now Mountain	6300	48	16.7	3/28	15.4	12.1	14.3
tarr Ridge	5150	36	10.6	3/28	10.6	9.6	10.
				1			
	UPPER DESCHUTES	, CROOKE	D WATERSHE	EDS			
err	5670	24	9.0	3/26	8.7	7.9	8.5
arks Creek	4540	36	14.1	3/29	13.6	10.3	13.0
now Mountain '	6300	48	16.7	3/29	15.4	12.1	14.
	KLAMATI	H WATERSI	HEDS				
uartz Mountain	5230	48	15.3	3/29	10.0	7.3	9.1

APRIL 1, 1974

COIL MOICTHE

DRAINAGE BASIN and/o			e (Inches)	Date of	Soil Moisture (Inches)			
Name	Elevation	Depth	Capacity	Survey	This Year	Last Year	Average	
	LAKE COUNTY, GO	OOSE LAKE	WATERSHED:	s				
Camas Creek Quartz Mountain	5720 5230	42 48	14.5	3/29	13.3	12.9	12.8	
quarcz mountain	5230	40	15.5	3/29	10.0	7.3	9.1	
	HARNEY BA	ASIN WATE	RSHEDS					
Discount size Coming				7/00	10.0			
Blue Mountain Spring Silvies	5900 6900	42 48	16.9 16.4	3/29 b	12.2	6.6 15.9	11.5"	
Snow Mountain	6300	48	16.7	3/29	15.4	12.1	14.3	
Starr Ridge Willow-Bald	5150 5000	36 24	10.6	3/28 3/28	10.6	9.6 4.5	13.7" 14.3" 10.1" 5.9"	
VIIIOW-Balu	3000	24	0.0	3/20	0.4	4.5	3.9	
·	•							
					ŀ			
	•							
	<i>‡</i>							
	,	÷.		-				
				•				
					Ì			
•								
•			8					

⁽a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

APRIL 1, 1974

RECIPITATION (Inches)	CURRENT IN	IFORMATION \	PAST RECORD		
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Precip- itation	Last Year	Average
Allison Work Center (Harney County)	5320	From 2/27			
Althouse (Josephine County)	4530	to 3/29 From 2/27	4.50	5.06	
Arbuckle Mountain (Morrow County)	5400	to 3/29 From 2/23	8.10	4.73	
Brooks Meadow (Hood River County)	4520	to 3/27 From 2/26	2.70	1.82	
Camas Creek (Lake County)	5825	to 3/26 From 2/27	5.62	0.56	
County Line (Umatilla CountyStarkey Hdqs.)	4800	to 3/29 From 2/28	6.40	2.50	
Goodrich Lake (Baker County)	6775	to 3/28 From 2/28	2.25	.00	•
Lucky Strike (Umatilla County	5050	to 3/28 From 2/28	6.00	6.44	
Marks Creek (Crook-Wheeler Cos.)	4540	to 3/28 From 2/27	2.25	2.10	
Quartz Mt. Summit (Lake County)	6300	to 3/29 From 2/26	2.50		
Silver Creek (Lake County)	4900	to 3/29 From 2/28	4.06	2.43	
Strawberry (Lake County)	5760	to 3/26 From 1/26	1.97	1.85	
Summer Rim (Lake County)	7200	to 3/31 From 2/27	9.40		
Taylor Butte (Klamath County)		to 3/27	5.00	3.00	
	5040	from 2/25 to 3/21	3.01	1.40	
Taylor Green (Union County)	5800	From 2/27 to 4/4	5.80	2.20	
Tipton (Baker County)	5100	From 2/28 to 3/28	2.25	2.25	
		-			
•					

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report — data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



N, 5	MR	EIN, AT LON. ST - 149 - Rul	ELEV NUMBER	NAME	LOCATI	ON ELEV	NINGER	NAME.	LOCATION ELEV	NUMBER	NAME LOCATION CONT.	
1666 1659 a 1551 VA 1554 VF 1761 1661 0a 1686 a 1587 a 1587 a 1587 a 1587 a 1587 a 1587 a 1584 a 1564 a 1564 a 1564 a 1564 a 1565 a 1565 a 1566 a 156	OWYHEE, MALHEUR WAI Owyhee Riv Antelore Ridge (Ida Sattle Creek (Ida Sear Creek (Nev Big Bend (Nev Big Bend (Nev Buckskin, Upper (Nev Bull Sasin (Ida Columbia Sasin (Nev Disaster Peak (Nev Famm Creek (Nev Francheek (Nev Francheek (Nev Francheek (Nev Branite Peak (Nev Branite Draw Bookout Sutte Louse Canyon Martin Creek (Nev Branite Creek (Nev	TERSHEDS 11 10 20 85 16 10 10 115 16 10 31 46N 588 10 30 45N 566 11 43N 398 11 43N 398 11 43N 344 10 31 44N 531 10 31 44N 531 10 31 43N 544 10 31 43N 548 10 31 43N 548 10 31 43N 548 10 31 43N 568 10 31 45N 568 10 31	16H3AP 16G7MP 17G5a 17H6a 16G11a 15H6MP 5700 15H3A 16F3AP 6700 16G1P 7200 16G1P 7200 16F6a 6650 15H9MP 6500 16F7a 7000 15H3A 7000 16F6a 6650 15H9MP 6500 16H7a 7000 15H8 7900 16G1B 7800 16G1B 7800 16G1B 7800 16G1B 7800 18E1B 18F6a 18F7a 18F7a 17F2a	Midas Mud Flat Oregon Canyon Quinn Ridge Red Canyon Rodeo Flat 76 Creek Silver City Silvies South Mountain N Stag Mountain Succor Creek Taylor Canyon Toe Jam Tremewan Ranch Triangle Trout Creek "V" Lake Vaught Ranch War Eagle Molheu Blue Mountain Sp Buck Pasture Bully Creek Call fleadows Cottonwood—Indial	(Nev) 32 41N (Ida) 25 38 (Nev) 35 39N (Nev) 29 40N (Nev) 9 39N (Ida) 25 7S 10 415 (Ida) 10 115 (Ida) 20 55 or River 28 29S 11 17S 29 205 n 3 195	46E 7200 2W 5500 40E 6950 41E 6300 4W 6650 53E 6800 58E 7100 3W 6400 3SE 6900 5W 6340 5SE 7800 5W 6200 5SE 7700 5SE 7700 5SE 7700 5SE 7700 3SE 7800 321E 6600 321E 6600 321E 5300 33E 5300 37E 5300 33E 5300 37E 5300 33E 5300 37E 5300 33E 5300	18E20 18E26a 18E18 18E22a 18F1 18E32p* 18F4p 18E13M 17E1Mp 18E20 18E8 18E9p	Eldorado Pass Flag Prairie Lake Creek Logan Valley Rock Spring S. Fk. Willow Cr. Stinking Water BURNT, POWDER, PINE, GR RONDE, IMNAHA WATERS Burnt River Blue Mountain Summit Ocoley Mountain Eldorado Pass Gold Center Tipton Powder River Anthony Lake Bourne Dooley Mountain Eilertson Meadows Gold Center Goodrich Lake	20 14\$ 38E 4600 32 16\$ 36E 4750 10 16\$ 33°,E 5200 13 16\$ 33°,E 5100 23 18\$ 32E 5100 2 16\$ 37E 5500 34 21\$ 34E 4800 ANDE HEDS 121 6 12\$ 36E 5098 32 11\$ 40E 5430 21 9\$ 36E 5340 34 10\$ 35E 5100 18 7\$ 37E 7125 33 8\$ 37E 5800 21 9\$ 36E 5340 34 10\$ 35E 5100	18E23 18E30 18E28 1707P 1708 1701 1702P 18E1P 17010a 1809 1808P 1805 1805 1805 17013a 17064 1807 17011a 1707P	Little Alps	Commence of the Commence of th
15F20a	vetilist voniterii (vet	77 10 1011 311	. 7000 18E19M	Crane Prairie	24 165	34E \$37\$	18E29 17012m	Intake House Ladd Summit	5 8S 38E 4930 S 5S 39E 3730	1702P 17014a	Aneroid Lake No. 2 16 4S 4SE 7300 Big Sheep 33 45 46E 6200	
E G G	NOW COURSES DATA MEASU OR E	ogue, Umpquo,	2279 02012 22006 2200000000	2163 20019 2163 20019 2163 20019 2164 20019 2166 20019 2166 20019 2166 20019	ke County, cose Lake	6 1941 N	18 22 0 1 18 22	Burnt, Powder P	100 1 100 1	1902P 18012MP 20E4 1804M 18019 1806P 1805 18020 1803 18016 1803 18017		

NUMBER	NAME	LOCATION ELEV	NUMBER	NAME	LOCATION ELEV	NUMBER	NAME	LOCATION ELEV
	Willow Creek		21E6 21E4	Hogg Pass	24 135 716 4755	21G6a	Oog Hollow	
1902P 18E1P	Arbuckle Mountain Anthony Lake	33 4S 29E 5400 18 7S 37E 7125	22E3 21E5	Hogg Pass Marion Forks Mill City Santiam Junction Whitewater Bridge	29 115 /E 2600 29 9S 3E 826 14 13S 7F 37S0	20G14a 22G12 21G4P	Oog Hollow Finley Corrals Fourmile Lake Gerber	11 36S 16E 6000 9 36S 5E 6000 12 39S 13E 4850
	UPPER JOHN DAY WATERS		21E3			22G26 22G16	Howard Prairie	32 38S 4E 4500
	Upper John Doy Ri	ver	21E8	McKenzie Rive		22G15 22G5	Lake of the Woods Park Readquarters	11 37S 5E 4960 8 31S 6E 6550
1902P 18012MP	Arbuckle Mountain Battle Mountain Summit	33 4S 29E 5400 29 3S 31E 4340	22E4 21E7	Oead Horse Grade Lost Creek Ranch McKenzie McKenzie Bridge Vida White Branch Slide	13 165 /E 3700 19 16S 7E 1956 3S 15S 7UF 4800	20G6MP 22G11 22G33	Hyatt Prairie Reservoir Lake of the Woods Park Readquarters Quartz Mountain Seven Lakes No. 2 Seven Mile State Line (Cal) Strawberry Summer Rim Sycan Flat Taylor Butte	2 38\$ 16E 5320 26 33\$ 5E 6200
19E2M 18E16MP	Beech Creek Summit 22 8	8 33 115 30E 4650	22E5 22E6	McKenzie Bridge Vida	13 16S 5E 1372 28 16S 2E 800	20H1a 20G9AP	State Line (Cal)	20 -335 6E 5725 21 (48N 11E 5750 4 40S 16F 5760
18E13M 20E4 19E3MP	8lue Mountain Springs 8lue Mountain Summit 8utte Creek Summit Oerr	6 125 36E 5098 5 8S 22E 3930 14 13S 23E 5670	21E9	White Branch Slide Middle Fork Willomett		20G2AP 20G13a	Summer Rim Sycan Flat	23 33S 16E 7100 25 31S 14E 5500
18E8 18E24a	Gerr Gold Center Indian Cr. 8utte Izee Summit Lucky Strike Marks Creek Ochoco Meadows Olive Lake Schoolmarm Starr Ridge Tipton Williams Ranch	21 9S 36E 5340 5 1SS 33E 6SS0	22F3			21G3P		
19E9P 1806P	Izee Summit Lucky Strike	28 165 29E 5293 28 3S 32E 5050	22F8 22F6	Lookout Point Dam McCredie Springs	13 19S 1W 7SO 36 21S 4E 2120		Power and Light Compa	
20E1MP 20E2 18E7a	Ochoco Meadows	25 12S 19E 4S40 21 13S 20E S200	22F7 22F5 22F4	Railroad Overpass Salt Creek Falls	21 22S 5E 2750 32 22S 5UF 4000	4 5	Crystal (PP&L) Fort Klamath (PP&L)	34 345 /E 4187 26 34S 6E 4200 22 33S 7UF 4150
1807 19F1*	Schoolmarm Snow Mountain	28 4S 34E 4775 1 19S 26E 6220	22F2P 22F14*	Cascade Summit Lookout Point Dam McCredie Springs Oakridge Railroad Overpass Salt Creek Falls Waldo Lake Willamette Pass	15 24S 6E 5600 33 24S 5LE 5600	8 6	Chiloquin (PP&L) Crystal (PP&L) Fort Klamath (PP&L) Harriman Lodge (PP&L) Kirk (PP&L)	3 36S 6E 4200 1 33S 7E 4533
19E7M 18E9P 18E2\$MP	Starr Ridge Tipton	20 15S 31E 5150 34 10S 35NE 5100		Coost Fork Willometre				
	Williams Ranch JPPER DESCHUTES, CROOKED		22F9 22F10	Champion Golden Curry Creek	12 23S 1E 4500			
			22F13	Champion Golden Curry Creek Layng Creek R.S. Lund Park Weaver Creek	31 21S 1E 1200 22 22S 1E 1740	LA	KE COUNTY, GOOSE LAKE W	/A TERSHEDS
21E22 21F8	8ald Peter Caldwell Ranch	29 10S 9E 5400 30 21S 8E 4400	22F11			20G15a	Goose Loke Bear Flat Meadow	27 36S 19F 5900
22F3 21F11 21E6	Cascade Summit Chemult	7 23S 6E 4880 21 27S 8E 4760	23E1	Mory's River Mary's Peak		20G8MP 20G11A	Camas Creek Cox Flat	5 39\$ 21E 5720 16 37\$ 18E \$750
21F4 21F6*	Hungry Flat Irish-Taylor	29 18S 11E 4400 2S 205 6E 5S00		Luckiomute Rive		20H2a 20H3a 20G1 7a	Oismal Swamp (Cal) Patton Meadow	30 47N 11E 5200 31 48N 116E 7200 28 38S 18E 6800
21F10 21E16	Upper Deschutes R 8ald Peter Caldwell Ranch Cascade Summit Chemult Hogg Pass Hungry Flat Irish-Taylor New Crescent Lake New Outchman Flat #2 Racing Creek Tangent Three Creeks Butte Three Creeks Meadows Waldo Lake Willamette Pass	11 24S 6E 4800 21 18S 9E 6400	23E2			20G6MP 20H1a	Bear Flat Meadow Camas Creek Cox Flat Crowder Flat Oismal Swamp Patton Neadow Quartz Mountain State Line Strawberry Willow Creek	2 38S 16E S320 21 48N 11E 5750
21E23 21F3 21E1S	Tangent Three Creeks Sutto	15 10S 9E 4800 28 18S 10E S400	23E3	Laurel Mountain Valsetz Summit Tuolotin River		20G9AP 20G16a	Strawberry Willow Creek	4 40S 16E 5760 13 40S 21E 6020
21E13* 22F2P	Three Creeks Meadows Waldo Lake	34 16\$ 9E 5650 15 215 6E 5600	2302*	Seine Creek	34 IN 5W 2000		Abert Lake	
22F14*	Willamette Pass	33 24S 5'₂E 5600	2301*	Saddle Mountain	25 1N 6W 3250	20G15a 20G18ap	Bear Flat Meadow Colvin Creek	27 36S 19E 5900 12 36S 21E 6550
19E3MP	Crooked River Oerr	14 13S 23E S670		ROGUE, UMPQUA WATER	RSHEDS 191	20G11A 20G14a	Cox Flat Finley Corrals	16 37S 18E S750 11 365 16E 6000
20E1MP 20E2	Marks Creek Ochoco Meadows	25 125 19E 4540 21 13S 20E S200	220.40	Rogue River	17 416 70 4520	20G6MP 20G10a	Bear Flat Meadow Colvin Creek Cox Flat Finley Corrals Quartz Mountain Snerman Valley	2 38S 16E 5320 15 37S 21E 6600
19F1* 19E4	Marks Creek Ochoco Meadows Snow Mountain Tamarack	1 19S 26E 6220 8 1SS 2SE 4800	23G4P 22G6 22G28	Annie Spring Beaver Oam Creek	19 31S 6E 6018 1 38S 4E S100		Summer Lake	
HOOD	, MILE CREEKS, LOWER DESCH		22G21P 22G13P	Althouse Annie Spring Beaver Dam Creek Big Red Mountain Billie Creek Divide Caliban	31 40S 1W 6250 30 36S 5E 5300	20G2AP	Summer Rim	23 33S 16E 7100
	Hood River		22G30 22G27 22F19	Caliban Oeadwood Junction Oiamond-Crater Summit Fish Lake Fourmile Lake Grayback Peak Howard Prairie	16 405 1E 6500 8 385 4E 4600 34 285 6F 5800		Silver Lake	
2106P 2102S	Brooks Meadows	2 2S 10E 4300	22G14P 22G12	Fish Lake Fourmile Lake	3 375 4E 4665 9 36\$ 5E 6000	21F2P 20G13a	Silver Creek 2S Sycan Flat	8 26 29S 13E 4900 25 31S 14E 5500
2101 21020	Brooks Meadows Cooper Spur Greenpoint Reservoir Knebal Springs Parkdale Phlox Point	27 2N 9E 3200 31 1S 11E 3850	23G3 22G26	Grayback Peak Howard Prairie	9 40S SW 6000 32 38S 4E 4500		Warner Loke	
21023 2108*	Parkdale Phlox Point	5 1S 10E 1770 7 3S 9E \$400	22G16 22G22 22G31	Hyatt Prairie Reservoir Little Red Mountain Mt. Ashland Switchback	25 405 2W 6500	20G8MP 20H3a	Camas Creek Dismal Swamp (Cal)	\$ 39S 21E 5720 31 48N 16E 7200
2104 2109 21028	Red Hill 5till Creek Switchback	20 1S 9E 4400 2S 3S 85E 3670 28 1S 9E 3255	23G14 23G5	Mule Creek Page Mountain	8 32S 9W 3680 5 41S 7W 4045	19G1a 20G10a 20G16a	Hart Mountain Sherman Valley Willow Creek	1 36S 25E 6350 15 37S 21E 6600 13 40S 21E 6020
2107P 21021	Tilly Jane Ulrich Ranch Junction	15 2S 9E 6000 28 1S 11E 33S	2203	Park Headquarters Seven Lakes No. 2 Silver Burn	8 31S 6E 6550 26 33S 5E 6200 30 30S 4E 3720	200100	Guano Loke	13 405 216 6020
21030 21024	Umbrella Falls Upper Valley	3 3S 9E 540 20 1S 10E 253	22020	Siskiyou Summit Ski Bowl Road	17 40S 2E 4630 22 40S 1E 6000	19H1 19G1a	Sald Mountain (Nev)	17 4SN 21E 6720
	Mile Creeks - Mosier	Creek	22G9 22G1	South Fork Canal Whaleback	12 33\$ 3E 3\$00 4 31\$ 2E 502\$	19H4a	Hart Mountain Little Bally Mt. (Nev)	1 36S 2SE 6350 8 4SN 19E 6600
2106P 21020	Brooks Meadows Knebal Springs	2 2S 10E 4300 31 15 11E 3850		Umpqua River			HARNEY BASIN WATE	
21021	Ulrich Ranch Junction Lower Deschutes R	28 IS 11E 3350	22F18P	Champion Oiamond Lake	12 235 1E 4500 29 275 6E 531S	18F7a 19F2	Call Meadows Oelintment Lake	29 20S 33E 5340 28 195 26E \$600
21012	Clear Lake	29 4S 9E 3SO		King Mountain No. 1 King Mountain No. 2	5 133S 4W 4S00 4 33S 4W 4000 33 32S 4W 3648	19F3 18F3P	Emigrant Sutte Idlewild Camp	14 21S 27E 5000 27 20S 31E 5200
21022 21E6	Clear Lake Experimental Hogg Pass	29 45 9E 350 24 13S 7ME 47S		King Mountain No. 3 King Mountain No. 4 King Mountain No. 5	33 325 4W 3049	19E9P 18F1	Izee Summit Rock Spring	28 16S 29E \$293 23 18S 32E 5100
	LOWER COLUMBIA WATE	RSHED\$ 171	23G13 22F16	King Mountain No. 6 North Umpqua	20 325 4W 1820 19 265 6£ 4215	19F1* 19E7M 18F4P	Snow Mountain Starr Ridge Stinking Water	1 195 26E 6220 20 15S 31E S150 34 21S 34E 4800
	Sandy River	2 22 25 640	22F23 22F24 22F25	Red Butte No. 1 Red Butte No. 2 Red Butte No. 3	36 27S 2W 4S60 30 27S 1W 4000 30 27S 1W 3S00	10, 1,		
2108* 2109	Phlox Point 5till Creek	7 3S 9E \$40 2S 3S 8VE 367		Red Butte No. 4 Red Butte No. S	30 27S 1W 3000 20 27S 1W 2800	18F6a	Donner Und Blitze Buck Pasture	28 29S 35E S300
	WILLAMETTE WATERSH	HEDS 181	22F28 22F17	Red Butte No. 6 Trap Creek	17 27S 1W 2000 1 27S 4E 3800	18G2PA 19G1a	Fish Creek Hart Mountain	4 33S 33E 7900 1 36S 2SE 6350
02020	Clackamas lake	er 3\$ 55 85E 3400	22G1	Whaleback	4 31S 2E S02S	18G1PA 18G7a	Silvies "Y" Lake	3S 32S 33E 6900 31 3S S 32'E 6600
21013 21012 21016	Clackamas Lake Clear Lake Lake Harriet	29 4S 9E 3S00 4 6S 7E 2045		KLAMATH WATERSHE Klomath River			Trout and Whitehor	se Creeks
21014P* 2108*	Peavine Ridge 14 Phlox Point	\$ 1S 6S 7E 3S00 7 3S 9E S400	22G6	Annie Spring	19 315 6E 6018	18G6a 18H1	Oenio Creek Oisaster Peak (Nev)	
2109 21017	Still Creek Timothy Lake	25 3S 81:E 3670 26 SS 8E 3295		8illie Creek Oivide Chemult Cold Springs Camp	30 36S 5E 5300 21 27S 8E 4760 12 35S SE 6100	17G5a 18G5a	Oregon Canyon Trout Creek	8 40S '40E 69S0' 10 41S 38E 7800
	Sontiom River		20G12a 20H2a	Crazyman Flat Crowder Flat (Cal	9 34S 1SE 6100 1) 30 47N 11E 5200		Harney Lake	
22E1 22E2	Oetroit (City) Oetroit Oam	1 105 SE 1610 7 10S SE 1880	22F19	Oiamond-Crater Summit Oiamond Lake Jct. (97)	34 28S 6E 5800 1 29S 7E 4600	18G8a	8uckskin Lake	25 29S 30E 5200
			M - ·	nd Index to	OPECO	VI CN	IOW COLU	RSES



The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

Idaho Cooperative Snow Surveys Nevada Cooperative Snow Surveys Oregon State University Oregon State Engineer and Corps of State Watermasters Oregon State Highway Engineers Soil and Water Conservation Districts of Oregon

COUNTY Douglas County Water Resources Survey

FEDERAL Department of Agriculture

Cooperative Extension Service

Forest Service

Soil Conservation Service

Department of Commerce

NOAA, National Weather Service

Department of the Interior

Bonneville Power Administration

Bureau of Land Management

Bureau of Reclamation

Fish and Wildlife Service

Geological Survey

National Park Service

Department of National Defense

Corps of Army Engineers

PUBLIC UTILITIES

Pacific Power and Light Company Portland General Electric Company California-Pacific Utilities Company

MUNICIPALITIES

City of Baker City of La Grande City of The Dalles

City of Walla Walla

IRRIGATION DISTRICTS

Arnold Irrigation District Associated Ditch Companies Burnt River Irrigation District Central Oregon Irrigation District East Fork Irrigation District Grants Pass Irrigation District Hood River Irrigation District Jordan Valley Irrigation District Juniper Flat Irrigation District Lakeview Water Users, Incorporated Medford Irrigation District Middle Fork Irrigation District North Board of Control - Owyhee Project North Unit Irrigation District Ochoco Irrigation District Rogue River Valley Irrigation District South Board of Control - Owyhee Project Squaw Creek Irrigation District Talent Irrigation District Tumalo Project Vale-Oregon Irrigation District

Warmsprings Irrigation District PRIVATE ORGANIZATIONS

The Crag Rats, Hood River, Oregon

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

PORTLAND, OREGON 97205 1218 S.W. WASHINGTON ST.

. APR 15

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

Return this entire sheet to above address, if you changes in address below, including ZIP code). do NOI wish to receive this material , or if change of address is needed ((indicate



IRST CLASS MAII

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

domestic and municipal water water supply for irrigation, supply, hydro-electric power necessary for forecasting generation, navigation, Furnishes the basic data mining and industry "The Conservation of Water begins with the Snow Survey"

USDA MATIONAL AGRICULTURAL LIBRARY CURRENT SERIAL RECORD BELTSVILLE, MARYLAND